

Ser. No.10/577,833
Amdt. dated April 20, 2008
Reply to Office Action of September 20, 2007

PU030102

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Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Currently Amended) RF-circuit including a controllable mixer having at least one mixing transistor, to which mixing transistor an oscillator signal and an input signal are supplied, ~~with wherein~~ the input signal ~~comprising~~ comprises a useful signal and further signals, and ~~with wherein~~ an output signal ~~being~~ is produced as an output of the mixer, wherein a controller is provided, which applies a control signal to the ~~mixer-mixing transistor~~ as a function of the signal quality of the demodulated output signal, wherein the operating point of the at least one mixing transistor can be set by means of the control signal, in which case the intermodulation immunity and/or the noise in the output signal can be varied as a function of the operating point of the at least one transistor, wherein a controllable portion of the overall gain of the RF-circuit is determined by the operating point of the at least one mixing transistor ~~of the mixer~~.
2. (Currently Amended) Controllable mixer according to Claim 1, wherein a demodulator which is connected downstream from the mixer, and an evaluation circuit are provided for assessment of the signal quality of the demodulated output signal.
3. (Previously Presented) Controllable mixer according to Claim 2, wherein the evaluation circuit assesses the error rate of a digitally coded signal.
4. (Previously Presented) Controllable mixer according Claim 1, wherein a memory is provided for recording initial values, on the basis of which the signal quality can be assessed and optimized.
5. (Previously Presented) Controllable mixer according to Claim 4, wherein the initial values comprise information about a desired minimum signal quality, the symbol rate, the code rate, and/or the modulation method, and optimization routines for reception optimization can be selected as a function of the initial values.

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6. (Currently Amended) Method for controlling a mixer in a receiver having a demodulator and at least one mixing transistor, to which mixing transistor an oscillator signal and an input signal are supplied, ~~with-wherein~~ the input signal ~~comprising-comprises~~ a useful signal and further signals, and ~~with-wherein~~ an output signal ~~being is~~ produced as an output of the mixer, the method comprising the following steps:
- assessing the signal quality of the demodulated output signal;
 - setting the operating point of the at least one mixing transistor as a function of the quality of the demodulated output signal, wherein the intermodulation immunity and/or the noise of the at least one transistor are set by means of the operating point of the at least one mixing transistor,
wherein the method is further comprised by
 - setting a controllable portion of the overall gain of the RF-circuit ~~in~~ by setting the operating point of the at least one mixing transistor ~~of the mixer~~.
7. (Previously Presented) Method according to Claim 6, wherein the error rate of a digitally coded signal is evaluated in order to assess the signal quality.
8. (Previously Presented) Method according to Claim 6, wherein initial values which are stored at the start are selected in order to assess the signal quality and in order to set the operating point of the transistor.
9. (Previously Presented) Method according to Claim 8, wherein different initial values and/or optimization routines are selected for different modulation methods, code rates and/or symbol rates.